



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,036	11/04/2003	Dragan P. Petrovic	H0004603/SYS-P-1090 US 83	6143
7590 09/15/2005			EXAMINER	
Patent Services Group Honeywell International, Inc. 101 Columbia Road Morristown, NJ 07962			LARKIN, DANIEL SEAN	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/701,036	Applicant(s) PETROVIC ET AL.	
	Examiner Daniel S. Larkin	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 46-61 is/are rejected.
- 7) ☐ Claim(s) 62 and 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>25 July 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 25 July 2005. These drawings are approved.

Claim Objections

2. Claims 46-54, 62, and 63 are objected to because of the following informalities:

Re claim 46, claim line 4: The conjunction -- and -- should be inserted after the term "fluid".

Re claim 62, claim line 4: The conjunction -- and -- should be inserted after the term "housing". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 46-61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With respect to the limitations recited in claim 46, the specification fails to enable one of ordinary skill in the art to create a gas sensor carried by a housing, whereby the

gas sensor defines an internal sensing region with a first opening for an inflow of gas. The specification expressly discloses a sensing chamber 30a having an opening which defines a sensing region, wherein a gas sensor 34a is located within the gas sensing chamber 30a on a side wall of the chamber. The specification fails to provide any disclosure of the gas sensor having an internal sensing region with at least a first opening, which is aligned with openings of a first, metal conductor.

With respect to the limitations recited in claim 55, the specification fails to enable one of ordinary skill in the art to create a gas sensor with at least a gas inflow port, whereby condensers and a filter are located adjacent to the gas sensor so as to provide a gas inflow path through perforations located in the condensers, the filter, and the gas inflow port into the gas sensor. Reference to Figure 4 shows a gas sensing chamber (58-2) located in a housing (18-1) of the detector (50-2), whereby the two condensers (42-2, 42-3) with a filter (40-3) there between are located adjacent to the opening (56) of the gas sensing chamber (58-2) located in the housing (18-1). The two condensers and filter are not located adjacent the inflow port of the gas sensor as the claim suggests. The gas sensor disclosed in the specification only receives reflected radiant energy, not gas as suggested by the limitations of the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2856

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,502,308 (Wong).

With respect to the limitations of claim 46, the reference to Wong discloses a diffusion-type gas sample chamber, comprising: a housing (38); a gas sensor (28) carried by the housing, the sensor contained within an internal sensing region with at least a first opening (20) for an inflow of gas carrying fluid; and a first, metal condenser/mesh (24) with openings there through, the mesh is carried in the housing (38) adjacent to the gas sensing region with the first (20) and second openings aligned for a fluid inflow from outside of the housing into the sensing region (12), the inflow of fluid spreading through the sensing region by diffusion.

With respect to the limitations of claim 47, the reference discloses a first filter (22) carried by the housing, the filter (22) overlaying at least some of the second openings in the condenser/mesh (24).

With respect to the limitation of claim 48, the reference discloses, as shown in Figure 2, that the filter (22), the condenser/mesh (24), and the sensing region are arranged in a stacked relationship along a line corresponding to a direction of fluid flow.

Allowable Subject Matter

7. The following is a statement of reasons for the indication of allowable subject matter:

Prior art was not relied upon to reject claims 49-63 because the prior art fails to teach and/or make obvious the following limitations:

Claims 49-54: Providing a second filter carried by the housing, whereby the filters, the condenser, and the sensing region are arranged in a stacked relationship in combination with all of the limitations of the base claim and any intervening claims.

Claims 55-61: Providing a detector having at least two perforated, metal condensers with a membrane-type filter there between in combination with all of the remaining limitations of the claim.

Claims 62 and 63: Providing a detector comprising: a perforated housing; at least one perforated metal condenser carried in the housing; and a membrane filter that overlies at least some of the perforations of the housing in combination with all of the remaining limitations of the claim.

8. Claims 62 and 63 are objected to, but would be allowable if corrected in accordance with the examiner's suggestions made above in paragraph 2.
9. Claims 49-54 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
10. Claims 55-61 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

11. Applicant's arguments with respect to claims 46-63 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art to GB 2391622 (Jones et al.) discloses a condensation filter for protecting a gas sensor from condensation, comprising a gas sensor (8); and a filter (1) and screen (2) that is partially wrapped around the sensor.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2856


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Larkin whose telephone number is 571-272-2198. The examiner can normally be reached on 8:00 AM - 5:00 PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Larkin
AU 2856
10 September 2005



DANIEL S. LARKIN
PRIMARY EXAMINER